



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/293,011	04/16/1999	YVETTE MARIE GORDON	07442009001	4298

26161 7590 12/03/2002

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

SRIVASTAVA, VIVEK

ART UNIT	PAPER NUMBER
----------	--------------

2611

DATE MAILED: 12/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
---------------	-------------	----------------------	---------------------

EXAMINER

ART UNIT	PAPER NUMBER
----------	--------------

2611

18

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 9/9/02 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-4, 6, 7, 9, 11, 22 + 27-69 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-4, 6, 7, 9, 11, 22 + 27-69 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with Informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Art Unit: 2611

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-4, 7, 9, 11, 33-36, 38-40, 42-44, 49-52, 54-57, 59-63 and 67-69 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al (5,911,306).

As to claim 1, note the Burns et al reference which discloses a pull-based, intelligent caching system for a network system. Content service providers are connected to local service providers via an interactive distribution network. The local service providers facilitate the delivery of the content from the content provider to multiple subscribers. The local service

Art Unit: 2611

providers schedule the delivery of frequently requested content from the content provider prior to a peak time when the subscribers are likely to request content. The content is downloaded during off-peak hours and cached at the local service providers for serving to the subscribers during the ensuing peak time. In this manner, the frequently requested content is already present at the local service providers and ready to be served to the subscribers when they actually request it. When the content is finally requested, the data is streamed continuously in a real-time manner for just-in-time rendering at the subscriber computer. Note Figure 2 and the associated disclosure. The claimed plurality of local servers...is met by the local service providers, the ISPs 56, and the claimed at least one storage server...is met by the content server 52. The reference further discloses that the ISP's 56 include continuous media servers (CMSs) 74 which provide continuous media streams, such as audio and video data using a disk array data storage system having associated therewith a memory map storing the locations of, or pointers to, particular audio and video data streams, col 6 lines 66+. In operation, a requested video stream is retrieved by a processor using the associated pointer, and the stream is provided to the subscriber over communications lines 66, 68. This processor is naturally in communication with the content server 52 (via the cache server 72, Fig 2) in order to download audio and video data to the disk array data storage system for continuous media applications. Further, Burns also discloses two local servers for storing the selection of viewable data objects (both servers met by cache server and CMS in fig 2).

Art Unit: 2611

As to claim 3, the reference discloses subscriber PCS 58 and 60. The reference also discloses an alternative cable television environment consisting of cable headend servers, cable headends, and cable networks, in which television receivers are inherent.

As to claim 4, the ISPs 56 have servers which are designed to cache and serve the most frequently requested continuous data streams, such as video and audio data streams, and employ a disk array data storage system of finite capacity. Consequently, priority storage is considered inherent for data considered most 'frequently requested'.

As to claim 6, as noted above, the processor associated with the CMS 74 of the ISP 56 accesses a memory map which defines the logical locations of segments of audio or video streams which are stored across the disk array.

As to claims 9 and 11, the disclosed system is clearly an interactive, two-way, on-demand video system which dynamically provides access to video streams at the request of subscribers from local servers 72 and 74 in fig.

As to claim 34-36, 2, 38-40, 42 and 43, as noted above for claim 4, the reference clearly indicates that the most frequently requested content, whether that be Web pages or continuous media, is intelligently pre-cached in order to avoid latency problems. Frequently requested content is statistically identified and downloaded at off-peak hours, and stored at the CMS 74 accordingly. The 'alterable property' associated with the continuous media is the desirability of the media as defined by the frequency with which it is requested.

Art Unit: 2611

As to claim 44, the above-noted processor associated with the CMS 74 is, as indicated, is communication with the processor of the content server 52 for the purpose of coordinating the caching or downloading of continuous media. It can therefore be said that the flow of content is managed in a distributed fashion.

Claims 7, 49-52, 54-57, 59-63, 67-69 and 70-72 are met by that discussed above.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2611

4. Claims 33, 37, 41, 45-48, 53, 58 and 64-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al.

Regarding claim 33, claim 33 is met by that discussed above. Claim 3 additionally recites a second local server to store viewable data objects, said second local server being configured to transmit a particular viewable data object to one of the televisions in second set of televisions in response to receiving a request from one of the televisions in second of televisions. It would have been obvious to modify Burns to include the claimed second server for serving a second set of televisions to add speed and efficiency to the system by having a second server provide services to a second set of television to reduce the burden on one server resulting also in the increase of processing and speed of delivering data to televisions.

As to claims 37, 45 and 53, the reference discloses the collection of viewer statistics at individual ISPs 56 for caching purposes, and points to changes in taste based on changes in demographics and geographical regions. However, such centralized statistical collection and programming control is well-known in the cable television art when one is concerned with the programming for a collection of cable television headends. The advantage for centralizing control over priority designations for continuous media selections is that such processing is otherwise not required at the disparate headends. Further, continuous media, as opposed to Web page media, is often uniformly liked over broad regions, and consequently lends itself to the arrangement. Therefore, the Examiner submits that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the Burns et al system to attach a priority to

Art Unit: 2611

continuous media based on the statistical analysis of several ISPs/headends for the stated advantage.

As to claim 41 and 58, it can be said that the popularity of a given continuous media presentation dictates the revenue projections that headend providers would attach to the media. Assuming *arguendo*, it is well-known in the cable television art to cache new releases for video-on-demand purposes and to attach a higher service charge to such presentations for the purpose of capitalizing on new media. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the Burns et al system accordingly for the stated advantage.

As to claims 46-48 and 64-66, the Burns et al reference is silent as to a streaming control process, yet such control is notoriously well-known in the art of video-on-demand as a mechanism for imparting VCR-like control, such as pause, fast-forward, and reverse, to the client server environment. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the Burns et al system with such video stream control to make the presentation of continuous media more desirable to the user.

Response to Arguments

The Applicant amended claims 1, 33 and 49 to recite a content manager that is in communication with each of the several local servers and argues that the content manager is not

Art Unit: 2611

associated with any one of the local servers. Further the Applicant argues that the amendment clearly distinguishes the claimed content manager from the continuous media server taught by Burns.

The Examiner respectfully disagrees. The amendment does not distinguish the claimed content manager from the continuous media server. The amended claim recites “a content manager in communication with said storage server and each of said local servers, said content manager being configured to automatically control access, by a viewer receiver, to a viewable data object from said selection of viewable data objects”. The amended claim fails to distinguish the content manager from the continuous media server as argued by the Applicant. As a result, the Applicant’s arguments are not persuasive.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

Art Unit: 2611

(703) 308- 5399 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington. VA., Sixth Floor (Receptionist).


Any inquiry concerning this communication or earlier communications from the examiner
should be directed to Vivek Srivastava whose telephone number is (703) 305 - 4038. The
examiner can normally be reached on Monday - Thursday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Andy Faile, can be reached at (703) 305 - 4380.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the group receptionist whose telephone number is (703) 305 - 3900.

11/28/02

VS



VIVEK SRIVASTAVA
PATENT EXAMINER